

JCC

Foreign Availability of Oil Equipment Required  
by the Soviet Union

We believe the Soviet Union has multiple non-US sources to acquire the specialized petroleum equipment required to develop the resources of the onshore Astrakan and Karachaganak gasfields and the offshore Sakhalin Island gasfield. In addition, offshore wellhead equipment including high pressure blowout preventers can be purchased outside of the U.S. In some cases the Soviets or their Western project contractors may have to turn to the manufacturing subsidiaries of U.S. companies operating in Western Europe [~~and the U.S.~~], or to foreign companies operating as a joint venture with a U.S. company.

Astrakan Gas Development

Engineering and project management services can be supplied by companies such as Technip of France and Lurgi of West Germany. Downhole completion gear is the only equipment for which the Soviets may have to rely on U.S. foreign subsidiaries. U.S. companies and their foreign subsidiaries dominate the downhole market for gear such as packers, flow control equipment for production control, well safety valves for high pressure, high H<sub>2</sub>S service. However, a few French firms are developing the capability to compete in this market.

Gas Compressors for Karachaganak

Numerous foreign firms can manufacture large, high pressure gas compressors. British, French, Italian, West German, and

Japanese companies all provide intense competition for U.S. suppliers. The strength of the dollar has severely hurt U.S. companies. Nuovo Pignone of Italy is perhaps one of the strongest foreign competitors producing gas compressors.

#### Ice Tolerant Platforms for Sakhalin

The production of large offshore platforms for Arctic conditions is dominated by Japanese and Finnish companies. Large offshore drilling platforms for use offshore Alaska are being manufactured in Japan. Numerous foreign companies in Western Europe and Japan specialize in the engineering design of these facilities. A factory for ice tolerant offshore platforms for the Far East could probably also be built by these suppliers.

Recently, the South Koreans have entered the offshore semi-submersible market and probably have the capability to produce platforms for Arctic conditions. Two companies in Singapore also produce large offshore drilling platforms and probably could gear up for the Arctic market.

#### Offshore Wellhead Equipment

The offshore wellhead equipment is dominated by U.S. companies and their foreign subsidiaries. One U.S. company's subsidiary in West Germany has the ability to sell high pressure equipment to the Soviet Union without an export license because it acquired its technology prior to the imposition of foreign policy controls on exploration and production equipment prior to 1978.

While U.S. companies dominate the offshore wellhead field, Norwegian, French, and British companies are all gearing up to compete in this market. The technology is widespread and as the deep offshore market expands, U.S. companies will face increasing foreign competition. Numerous foreign companies including the Romanians can produce offshore wellhead equipment for low to medium measure service.